

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|----------------------|---------------------|------------------|
| 10/711,337 | 09/12/2004 | Hideaki Saito | SIMTEK6974 5336 | |
| 25776 | 7590 02/13/2006 | | EXAMINER | |
| ERNEST A. BEUTLER, ATTORNEY AT LAW 10 RUE MARSEILLE | | | OLSON, LARS A | |
| NEWPORT BEACH, CA 92660 | | ART UNIT | PAPER NUMBER | |
| | • | | 3617 | |

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| et | Application No. | Applicant(s) | | | |
|--|--|-----------------------------|--|--|--|
| | 10/711,337 | SAITO, HIDEAKI | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Lars A. Olson | 3617 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | |
| Status | | | | | |
| Responsive to communication(s) filed on This action is FINAL. 2b)⊠ This Since this application is in condition for alloware closed in accordance with the practice under E | action is non-final. nce except for formal matters, pro | | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-6 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 12 September 2004 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail Da | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12102004. | | atent Application (PTO-152) | | | |

-

Application/Control Number: 10/711,337

Art Unit: 3617

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onoue (US 6,287,160) in view of Nakamura (US 6,165,032).

Onoue discloses a tilt and trim arrangement for a marine propulsion device, as shown in Figures 1-12, that is comprised of a first unit, defined as Part #88, for fixed pivotal movement relative to the hull of a watercraft, as shown in Figure 1, and a second unit, defined as Part #90, that is adapted for connection to an outboard drive, as shown in Figure 2, said first unit being further comprised of a body that defines a cylinder bore, and said second unit being further comprised of a piston rod that is connected to a tilt piston with valves, defined as Part #166, that is located above a trim piston, defined as Part #168, as shown in Figures 8-12. A floating piston, defined as Part #170, is also provided below said tilt piston for further damping the degree of movement of said tilt piston.

Onoue, as set forth above, discloses all of the features claimed except for the use of a spring-biased piston for further damping the degree of movement of a tilt piston.

Nakamura discloses a tilt cylinder device for an outboard motor, as shown in Figures 1-8B, that includes a tilt piston, defined as Part #23, with shock absorbing valves, defined as Parts #26 and 27, for controlling the flow of fluid between two chambers within a cylinder assembly, defined as Part #20, and a spring-biased piston, defined as Part #24, for further damping the degree of movement of said tilt piston in one of said chambers. Said spring-biased piston is further comprised of a coil spring, defined as Part #86, that encircles a piston rod, defined as Part #46. Said coil spring is contained at least in part within a recess formed in said tilt piston and said spring-biased piston, as shown in Figure 3A.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a spring-biased piston, as taught by Nakamura, in place of the floating piston of the tilt and trim arrangement as disclosed by Onoue for the purpose of providing a means for additionally damping the movement of a tilt piston within a cylinder assembly.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Uppgard et al. (US 6,176,170) discloses a hydraulic actuator with a shock absorbing means in the form of a spring-biased piston.

Art Unit: 3617

4. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (571) 272-6685.

lo

February 6, 2006

LARS A. OLSON

2/6/06